

## FOREWORD

It is, of course, all too easy to take for granted what is on one's own doorstep. One knows when one first met that famous French historian or the Swiss chemist one had long admired from afar. As an adopted son and almost twenty-year resident of Philadelphia, I even know when I first met that native-son-turned-renowned-New York sociologist, Robert K. Merton (Cambridge, Mass., 1970). But when did I initially encounter that extraordinary chemist-turned-entrepreneur-and-information-scientist-and-polymath (who is also a New Yorker-turned-son-of-Philadelphia), Eugene Garfield? I simply don't know, and I thus must flout the emerging tradition of these forewords.

To have Gene Garfield on my doorstep (or, more precisely, four city blocks away) is one of the many considerable pleasures of life in Philadelphia. To experience his restless, insistent, original, probing mind at work in conversation is always a delight and a challenge. But, as so often, familiar and casual encounters can hide from one the true scale and scope of the phenomenon encountered. This fact is no doubt appreciated by all those readers of *Current Contents*<sup>®</sup> who, week by week, hold "conversations" with Gene as they read his editorials. Each editorial by itself is engaging, provocative, learned, and crusading. But when collected together, the *Essays of an Information Scientist* are truly awesome.

Gene's first "essay" appeared just twenty-five years ago (it is dated 19 June 1962, and I write on 12 June 1987). Entirely appropriately, it dealt with a large subject, "The ideal library—the informatorium," and projected how a library would look in the middle of the twenty-first century. In 1987 we are already a quarter of the way to Gene's destination, and several of his visionary ideas have become accepted, familiar realities. Happily, we are also nine volumes and many hundred essays further into the thinking of the leading information scientist of our age.

In this brief preface I want not to focus on the rich contents of this latest volume, but rather to comment on how a decade of *Essays of an Information Scientist* (volume one appeared in 1977) reveals the range, the inventiveness, and the persistence of Gene Garfield's thought. As to range, I shall merely note that Volume 1 covered subjects from the ideal library to "English—an international language for science," "Citation indexes in sociological and historical research," "What is the 'core' literature of chemical physics?" and "The social impact of science and technology, and the growth of anti-science." And, in like manner, Volume 9 ranges from "The metaphor—science connection," to "Refereeing and peer review," "Child care: an investment in the future," and "*The Scientist*: How it all began."

The persistence of Gene Garfield's thought (and action!) is apparent in every area of his wide-ranging interest. For instance, there was the early appearance of the *ISI Press Digest* (1:481) which rapidly became the idea of a newspaper of science (2:135 and p. 349) and which finally culminated in the great experiment of the publication of *The Scientist* (9:222).

Everything about Eugene Garfield's work at the Institute for Scientific Information testifies to his inventiveness. But here in the *Essays of an Information Scientist* we may trace such ideas as *Citation Classics*® (2:611), or co-citation (2:26), or the "personalized journal" (1:336), or *The Atlas of Science*® (2:311). Invention is of course not the same as successful *innovation*, as the fate of ISI's *Index to Book Reviews in Science (IBRIS)* testifies (5:327). However, in intellectual work as in publishing, persistence is one key to turning inventions into truly enduring innovations. And Gene's persistence is nowhere more apparent than in his recurring articulation of themes in the history and sociology of science.

Not surprisingly, Gene Garfield brings to those themes a strong concern with what can be measured, traced, rendered concrete (as in diagrams of "networks of papers"), and quantified. As early as 1962, he was seized by the possibilities of "Citation Indexes in Sociological and Historical Research" (1:42). His persistent social and historical imagination lay behind the question "Would Mendel's work have been ignored if the *Science Citation Index*® was available 100 years ago?" (1:69). His early communications with J.D. Bernal, Richard H. Shryock, Chauncey Leake, and Derek de Solla Price (1:45) testify to his indefatigable zeal in the pursuit of answers to his historical questions. Indeed, his contributions to the history of science alone would be sufficient to earn tenure in the academic world (see, for instance, "Has scientific communication changed in 300 years?" 4:394; "The eponymic route to immortality" 6:384; "George Sarton: the father of the history of science" 8:241).

Biographical accounts form one staple in Gene's historical writing, with his curiosity ranging from Benjamin Franklin to J.D. Bernal (both polymaths, like Gene himself). However the concern with the measurable is an even stronger theme. "Citation indexing, historio-bibliography, and the sociology of science" (2:158) was one early articulation of this search for order and meaning in the relentlessly expanding world of scientific knowledge. Characteristically, it was not long before the search and the theme had become a recognizable scientific specialty, hailed in "Scientometrics comes of age" (4:313). Here Gene's abounding curiosity gave rise to, yet could not simply be contained within, a whole new area of scholarly investigation.

As should now be apparent, volume 9 of *Essays of an Information Scientist* offers a rich conspectus of the evolving thought of one of the most remarkable polymaths of our contemporary world. I invite you to browse in this volume and to enjoy conversing with its author. And I invite you to the further delights of tracing the strands of the conversation back through the twenty-five years now available in this nine-volume series, and of projecting forward what new adumbrations and developments Eugene Garfield will delight us with in the days ahead.

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